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Content

- Nutrition
- Health Status
- Environment
- Body Condition Scoring



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Overview

- The safety and well-being of a horse are determined by a variety of factors. The factors that can be addressed and quantified without specialty equipment are:
 - (1) nutrition
 - (2) health status, and
 - (3) environment.
- Significant deficiencies in any one or more of these factors can have a detrimental impact on the animal's health and wellbeing.



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Nutrition



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Hydration

- Water is essential for temperature regulation, functioning of cells, circulation, digestion, and removal of toxins/waste products.
- Dehydration can lead to overheating, circulatory issues, and buildup of toxins. Severe dehydration can lead to death; this can occur within a few days of water deprivation.



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Hydration, *cont.*

- ★ • Most 1,000-pound adult horses need at least 10 to 12 gallons of water daily.
- The amount of water needed can vary depending on environmental temperatures, workload, if the horse is producing milk for a foal, presence of illness, and other variables.
- Drinkable water should be provided free-choice (24/7) or at least twice daily at approximate 12-hour intervals for at least one hour each time.



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Hydration, *cont.*

- During the summer months, lush pastures contain 60 to 80 percent moisture and can contribute to your horse's water requirement.
- In contrast, dried winter feedstuffs such as grain and hay contain less than 15 percent moisture. Thus, your horse will require more water in the winter.



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Hydration, *cont.*

- Snow and ice are not adequate water sources for horses. A few studies show that horses acclimated to winter weather can meet their water requirements from snow, but serious health risks may arise with snow intake due to:
 - Adjustment period as horses learn to ingest snow
 - Actual water content of snow
 - Total water intake



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Hydration, *cont.*

- Horses need drinkable water available daily, especially nursing females
- It is important that the horse's access to water is checked daily (in the event a bucket spills, the water freezes, the horse consumes it all, etc).



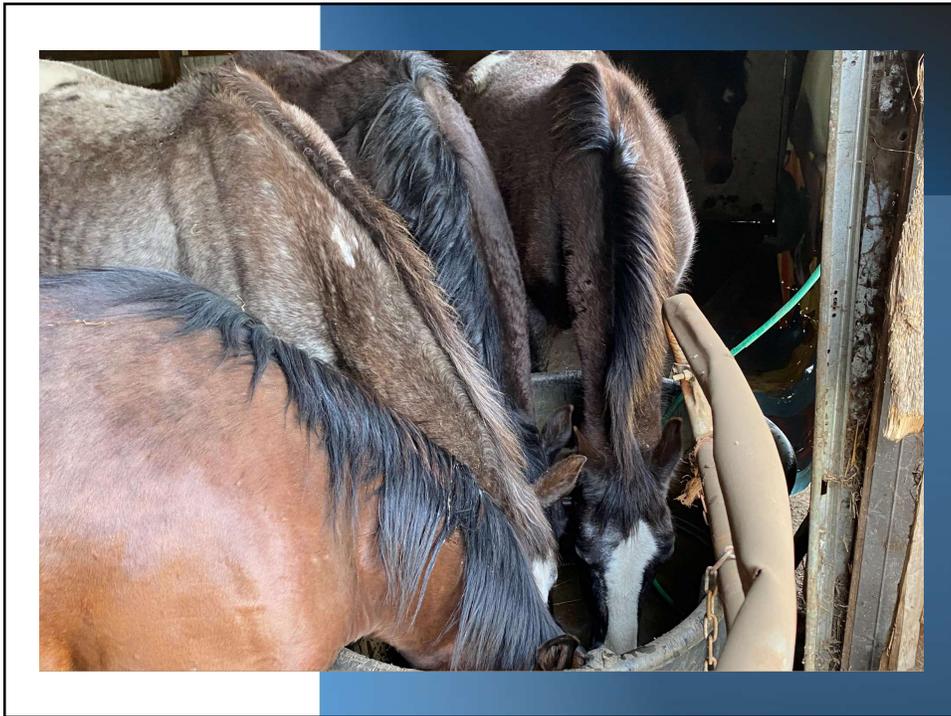
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Feeding

- Horses should be provided food at least once each day (unless otherwise indicated by a veterinarian).
- The food should be uncontaminated, wholesome, palatable, and of sufficient quantity and nutritive value to maintain the normal condition and weight of the horse.
- The diet should be appropriate for the individual animal's age, condition, and activity level.



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Feeding, *cont.*

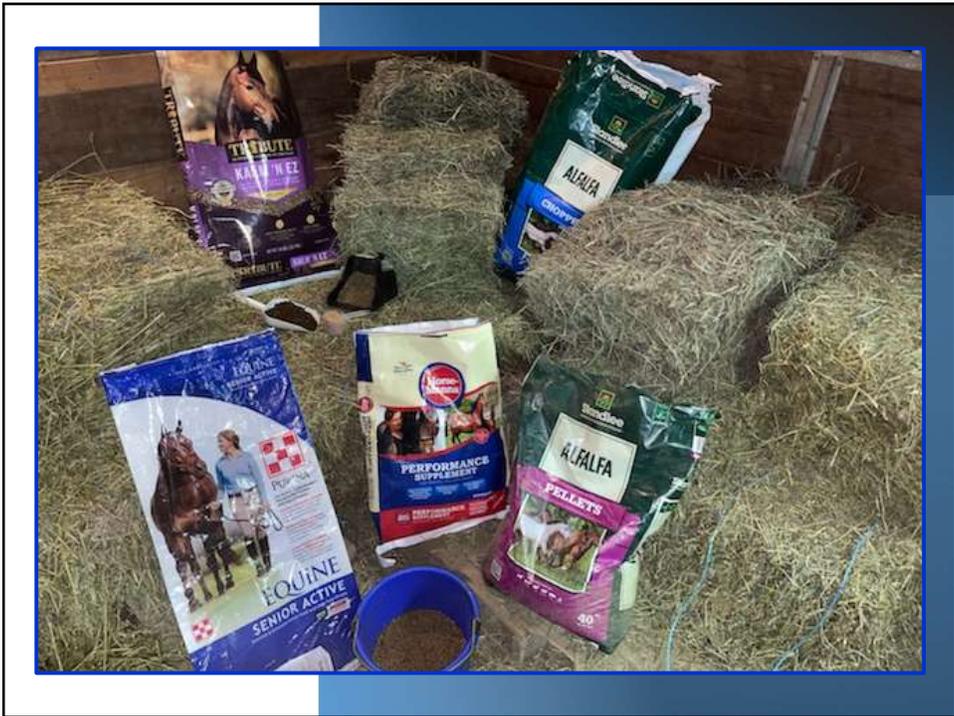
- ★ If a horse is not being fed a prepared feed that includes salt and minerals, the animal should also have access to supplemental salt and/or mineral block(s).



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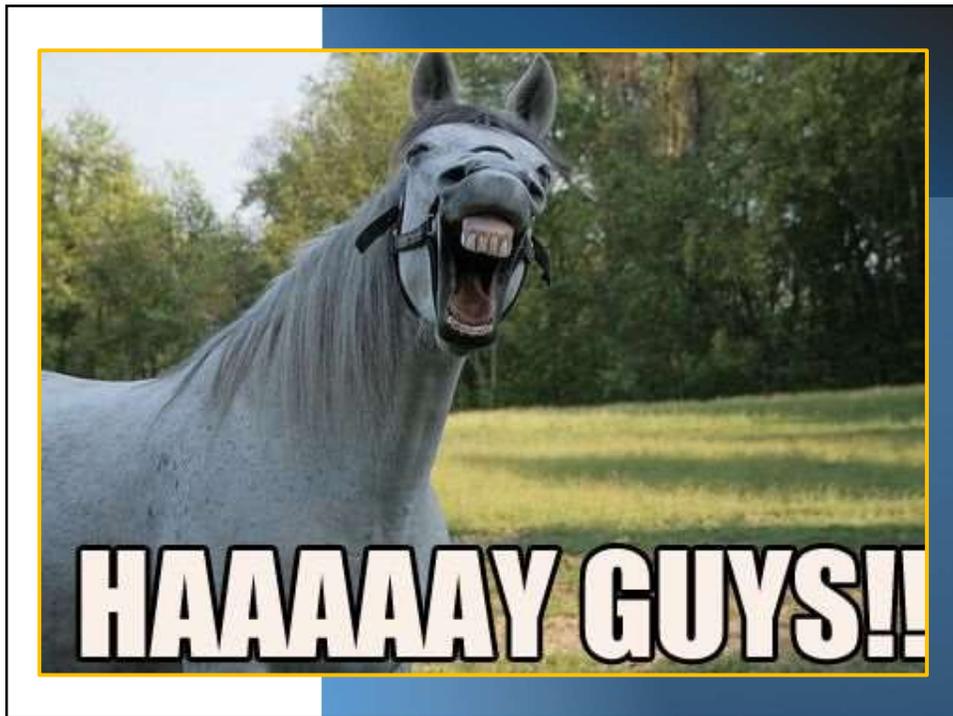
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Health Status



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Skin/Hair

- Skin/hair disorders cause discomfort to the horse and increase the opportunity for infection of the skin to occur.
- Any type of infection left untreated can increase the nutritional needs of the horse, decrease its ability to fend off additional bacterial, viral, or fungal infections, and can potentially become spread throughout the horse's body.



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Skin/Hair, *cont.*

- White Noses and Photosensitization



Photo: Canadian Horse Journal



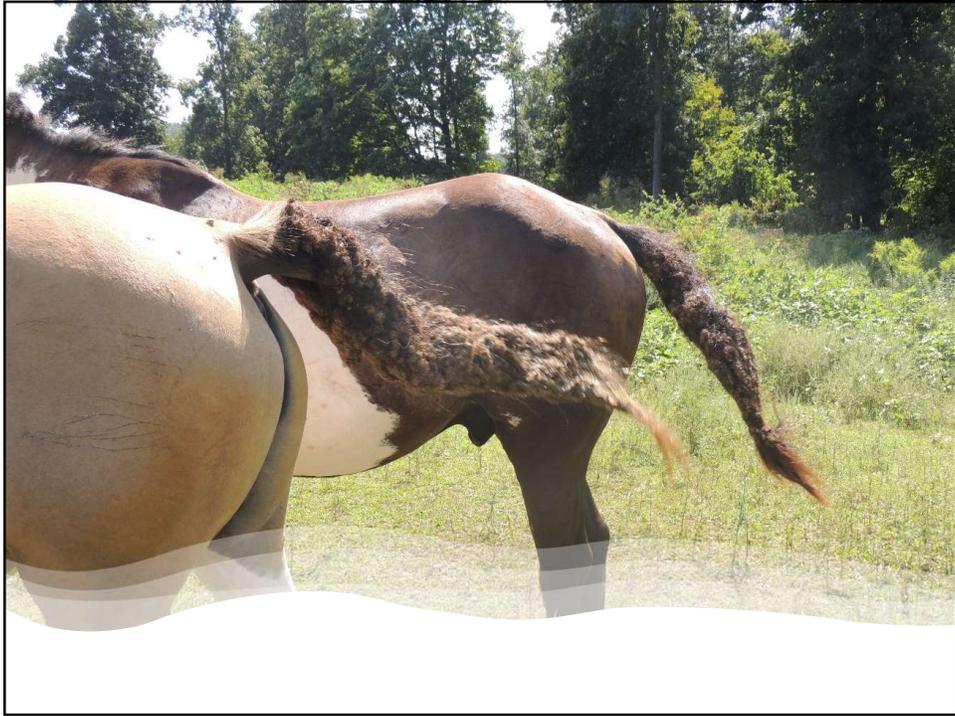
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Skin/Hair, *cont.*

- Burs
 - Concern with the presence of burs includes the discomfort they can cause the animal, the possibility of the burs scratching and irritating the skin, and their interference with the animal's ability to stay warm.
 - Burs have the ability to break the skin barrier. This can cause discomfort. It can also allow pathogens such as bacteria and fungus entry into the body.
 - Burs matting the body hair prevent the hair from being able to pilo-erect or stand up. Pilo-erection is used to trap air between the hairs, effectively creating a layer of insulation between the skin and the environment.



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 **BOAH** Indiana State Board of Animal Health

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Teeth

- To maintain proper dental hygiene and functionality, horses must have a veterinary oral and dental examination at least annually.
- Older horses and/or those with known dental pathology may require more frequent care.
- ★ • Routine floating of the teeth, tracking of dietary impacts on dental hygiene, and timely veterinary care for any observed abnormalities will help maintain a horse's dental functionality and health.



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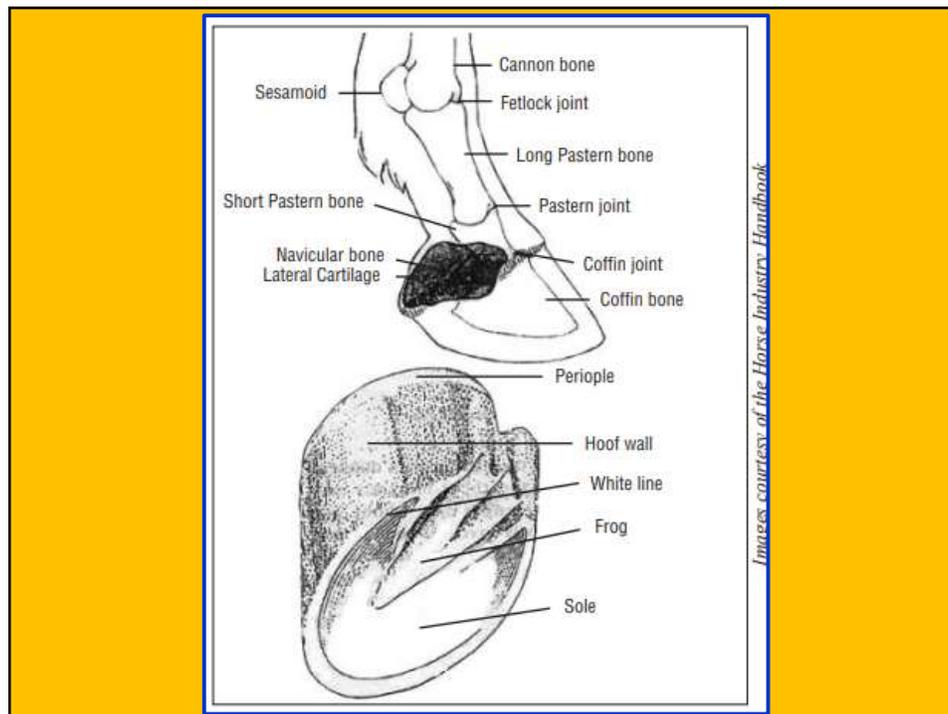
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Hooves

- Horses' hooves grow continuously and require routine (~every 6-12 weeks) trimming.
- Not providing adequate farrier care allows the hooves to grow excessively long and possibly unbalanced. This puts unnecessary strain on the tendons and ligaments of the legs and impedes the horse's ability to properly carry its weight.
- This abnormal strain can cause damage to the horse's tendons, ligaments, skeletal system, and muscles, adversely affecting its well-being.



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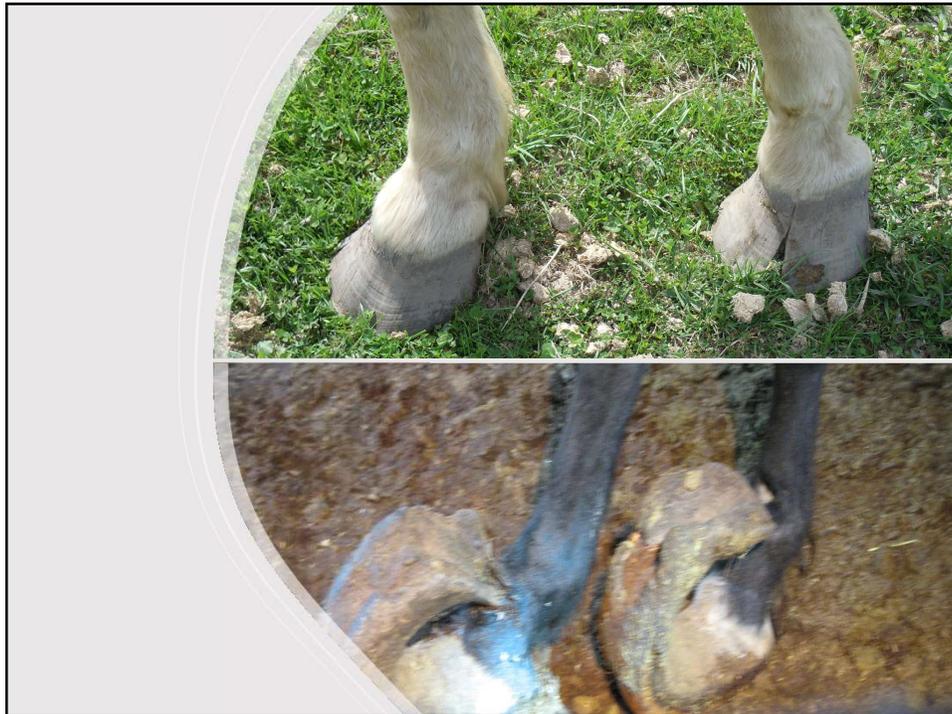
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Hooves, *cont.*

- Cracks
 - Defect or loss of integrity of the hoof wall
 - Can be caused from injuries or overgrowth
- Thrush
 - Foul-smelling black oozy liquid around the frog
 - Invades the sensitive tissues of the hoof and may cause lameness
 - Occurs when the horse is unable to access dry footing and is forced to stand in wet, soiled conditions



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Hooves, *cont.*

- ★ • Laminitis (Founder)
 - Swelling of the sensitive laminae
 - Swelling may cause the coffin bone to rotate or sink downward within the hoof.
 - There are several causes of laminitis.
- Navicular disease
 - Involves the navicular bone, bursa, ligamentous, and/or soft tissue structures
 - Horses affected by navicular will usually step toe-first because of heel pain.
 - Can be secondary to laminitis



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Eyes

- Whether chronic or acute, conditions of the eye should be taken seriously and be evaluated by a veterinarian for diagnosis and treatment.
- Cataracts, nuclear sclerosis, dry eye, glaucoma, and corneal abrasions are common conditions in older horses.
- Some of these conditions can cause an increase in discharge and pain, resulting in the horse holding the eye slightly closed to protect it from light and minimize pain.



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Colic

- ★ • General term for severe abdominal discomfort
- Typically presents in one of three manners:
 - Gas colic: buildup of gas in the intestinal tract
 - Impaction colic: blockage of the intestinal tract
 - Twisted colic: the intestinal tract becomes twisted
- Symptoms include:
 - Frequent turning
 - Kicking at the abdomen
 - Refusing food
 - Attempts to roll



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Environment



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Thermoneutral Zone

- Temperature range in which an animal does not have to expend additional energy to maintain its body temperature
- Adult horse's normal body temperature is approximately 99 to 102 degrees Fahrenheit
- Adult horse's thermoneutral zone is ~32 to 75 degrees Fahrenheit



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Shelter

- Adequate shelter may be man-made or natural.
- Provides an area with protection from excessive heat and sun, blowing winds, and precipitation
- A dark location protects horses from large biting flies as most species of flies avoid dark locations.
- Any type of shelter should be large enough to allow all animals access to the shelter at the same time.
- Shelter should be adequate to protect the horse based on its age, body condition, and health status.



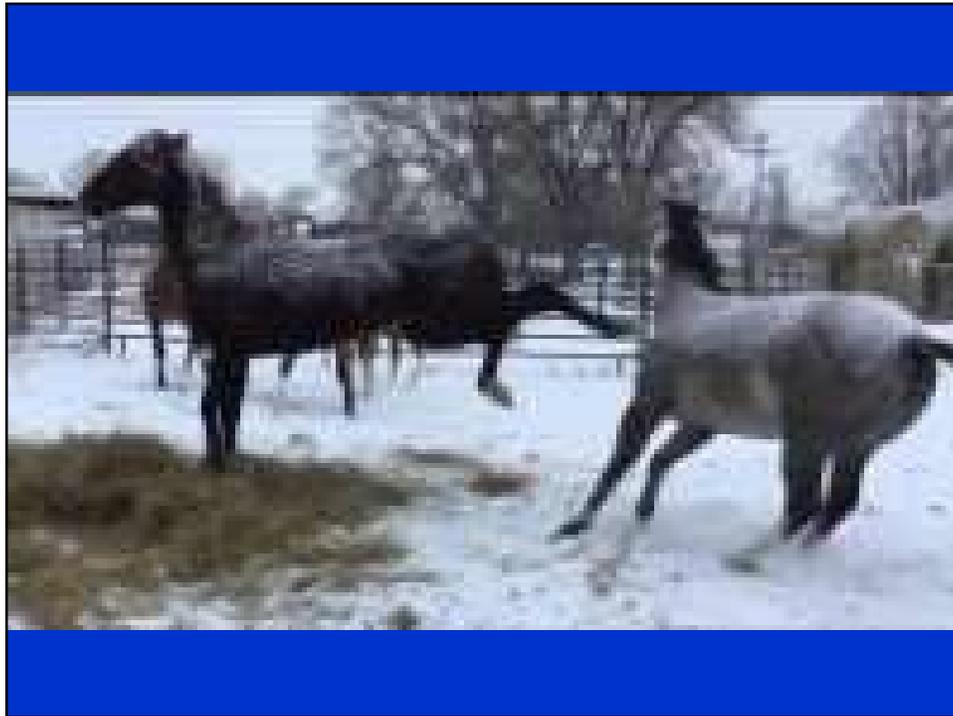
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Hierarchy

- ★ • Hierarchical society (dominant and subordinate)
- Dominant horses can be very protective of high value items and will commonly prevent or significantly reduce the access subordinate horses have to these items. It may be necessary to either:
 - Place the feed in several separate locations or
 - Individually restrain each horse while eating
- Additionally, horses should be housed in socially compatible groups to reduce aggressive behavior and subsequent injuries.



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Stewardship

- Any area in which a horse is maintained or housed should be free of hazardous items such as farm implements, trash/debris, sharp edges/fencing hazards, etc, to prevent the horse from becoming injured.
- Sharp edges can cause cuts or lacerations to the skin or eyes of a horse which can lead to infection, blood loss, lameness or other injuries.
- Ingestion of debris or non-food materials can result in internal injuries or infection.



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Stewardship, *cont.*

- If kept in an enclosed/small area, e.g. a stall, for an extended period, the area should be cleaned out to prevent accumulation of fecal matter and appropriate types/quantities of dry bedding should be provided.
- Regardless of whether kept in a pasture, arena, enclosed area or otherwise, the animal should have access to a dry area to stand and/or lie down.
- If contained within a fenced-in area, the fence should be of sufficient type and strength to contain the animal safely and effectively.



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Gender & Age Terminology

- **Colt**
 - <4 years, uncastrated
- **Gelding**
 - Any age, castrated
- **Stallion/Stud**
 - 4+ years, uncastrated

- **Filly**
 - <4 years
- **Mare**
 - 4+ years,
- **Broodmare**
 - Used for breeding

- **Foal**
 - Birth to 1 year

- **Yearling**
 - 1-2 years



★ **Pony does NOT mean a young horse.**

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In General

- **Good animal welfare provides animals:**
 - Physical good health
 - Freedom from illness and injury
 - Proper growth
 - Natural environment
 - Ability to display normal behaviors
 - Free of fear, pain, hunger, thirst



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Body Condition Scoring



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Body Condition Scoring

- **Objective** reflection of a horse's body condition
- Body condition scoring is used to determine whether the amount of energy and nutrition being provided is adequate to meet the horse's needs.
- A horse below ideal body condition is not receiving adequate energy; a horse above ideal body condition is receiving an excess of energy; and a horse in ideal body condition is receiving an appropriate amount of energy



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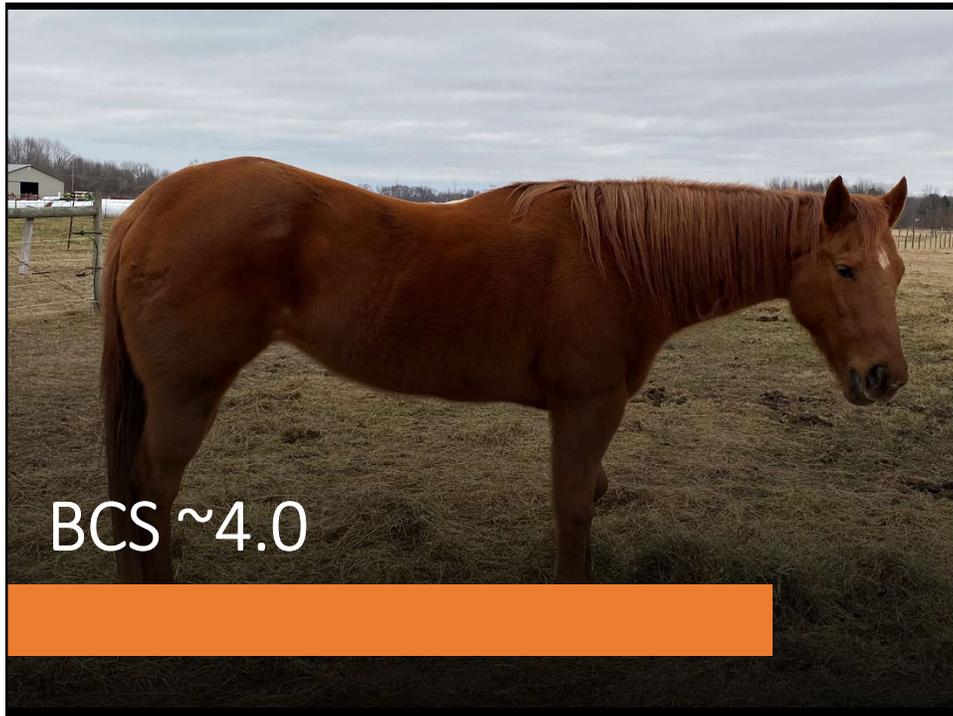
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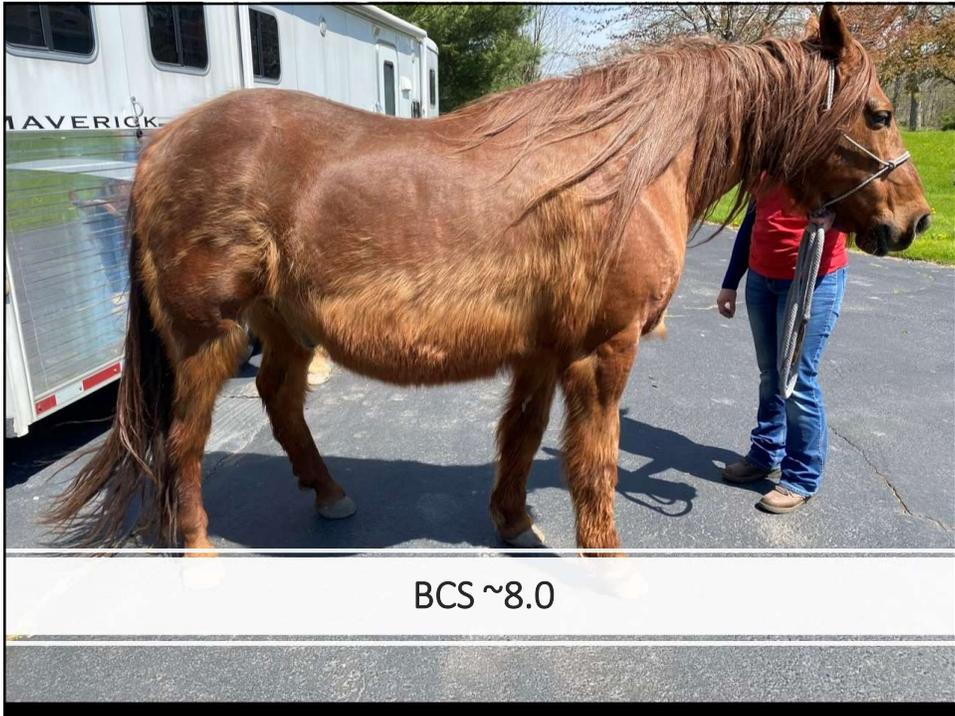
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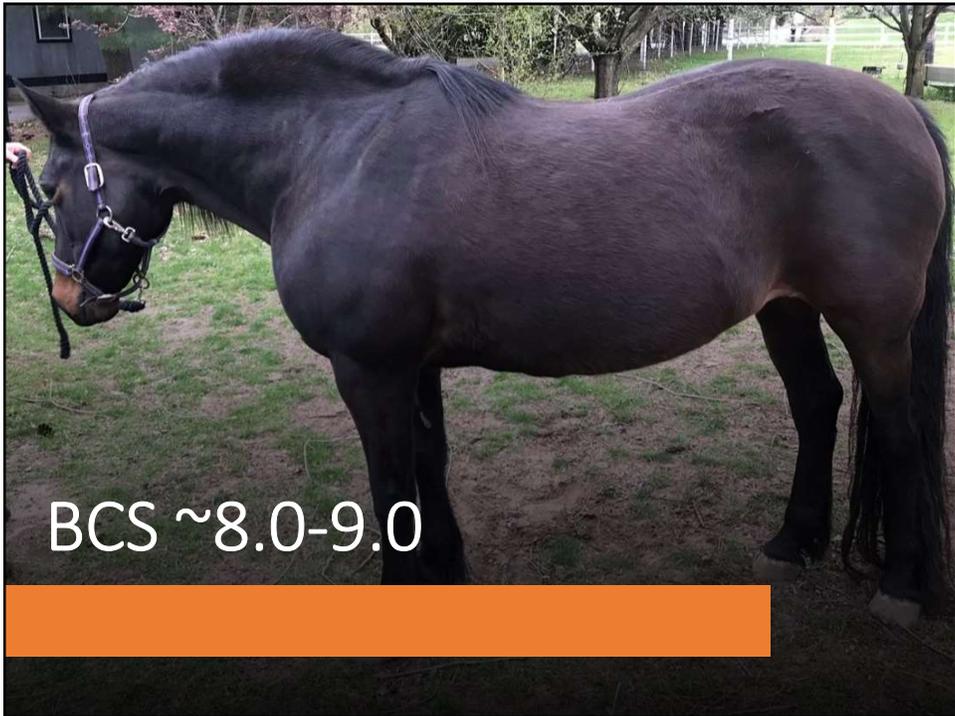
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Dr. Jennifer Strasser, DVM
jstrasser@boah.in.gov